

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P331699-840

Luminaire Tested: **SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331699-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 675 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

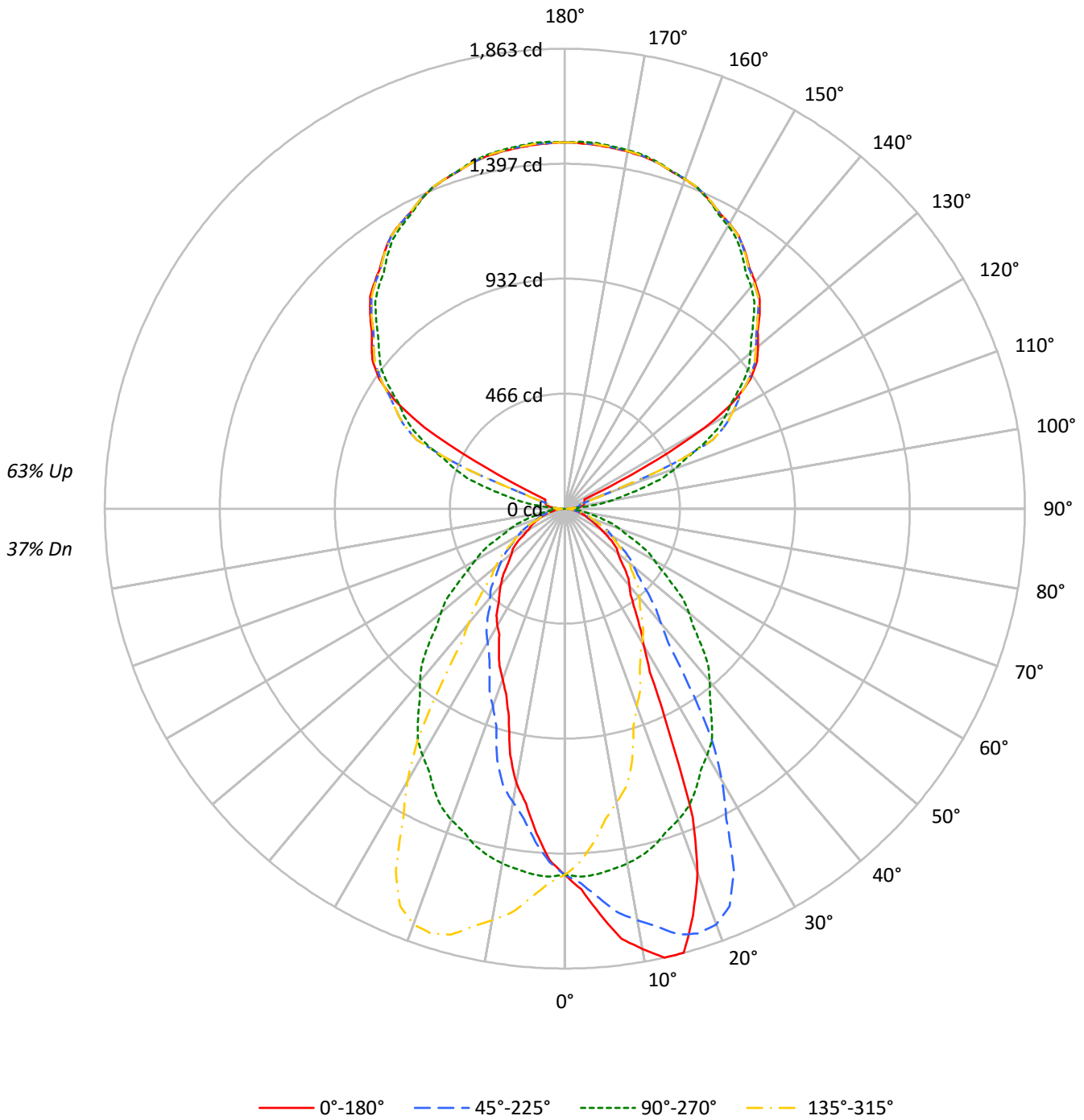
Lumens per Lamp: N/A
Luminaire Lumens: 6915.4 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	95	91	88	85	86	83	80	77	68	65	64	53	52	51	40	39	38	32
2	87	81	75	70	79	73	69	64	60	56	54	47	45	43	36	35	33	28
3	80	71	64	59	72	65	59	55	53	49	46	42	40	37	32	31	29	25
4	74	63	56	50	67	58	52	47	48	43	40	38	35	32	29	27	26	22
5	68	57	49	44	61	52	45	41	43	38	34	35	31	29	27	25	23	19
6	63	51	44	38	57	47	40	36	39	34	30	32	28	25	25	22	20	17
7	58	46	39	34	53	43	36	31	36	31	27	29	25	23	23	20	18	16
8	54	42	35	30	49	39	32	28	33	28	24	27	23	20	21	19	17	14
9	50	39	32	27	46	36	29	25	30	25	22	25	21	19	20	17	15	13
10	47	36	29	24	43	33	27	23	28	23	20	23	19	17	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	23954	23954	23954	23954
5°	26752	24104	21371	24104
10°	29681	23935	18525	23935
15°	31141	23584	14596	23584
20°	26996	23063	12631	23063
25°	17706	22352	11277	22352
30°	11917	21490	10206	21490
35°	9652	20402	9207	20402
40°	8585	19220	8517	19220
45°	7768	17831	7606	17831
50°	7068	16458	7043	16458
55°	6646	14933	6559	14933
60°	5561	13533	5493	13533
65°	4688	12287	5318	12287
70°	4334	10976	5013	10976
75°	4049	9551	4629	9551
80°	3738	7857	4119	7857
85°	3446	6206	3631	6206



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	2.0
10°-20°	391.9	5.7
20°-30°	505.0	7.3
30°-40°	479.9	6.9
40°-50°	411.1	5.9
50°-60°	313.0	4.5
60°-70°	197.9	2.9
70°-80°	98.8	1.4
80°-90°	29.4	0.4
90°-100°	49.5	0.7
100°-110°	181.5	2.6
110°-120°	485.1	7.0
120°-130°	800.8	11.6
130°-140°	851.6	12.3
140°-150°	791.6	11.4
150°-160°	636.4	9.2
160°-170°	410.1	5.9
170°-180°	141.2	2.0
0°-30°	1037.5	15.0
0°-40°	1517.4	21.9
0°-60°	2241.5	32.4
0°-90°	2567.6	37.1
90°-120°	716.1	10.4
90°-150°	3160.1	45.7
90°-180°	4348.0	62.9
0°-180°	6915.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1484	1484	1484	1484	1484	
5°	1651	1487	1319	1487	1651	163
15°	1863	1411	873	1411	1863	503
25°	994	1255	633	1255	994	472
35°	490	1035	467	1035	490	313
45°	340	781	333	781	340	263
55°	236	530	233	530	236	207
65°	123	322	139	322	123	125
75°	65	153	74	153	65	69
85°	19	34	20	34	19	21
90°	29	1	29	1	29	14
95°	46	70	46	70	46	43
105°	82	326	82	326	82	85
115°	88	617	88	617	88	220
125°	918	873	918	873	918	794
135°	1115	1080	1115	1080	1115	860
145°	1272	1253	1272	1253	1272	796
155°	1381	1380	1381	1380	1381	637
165°	1450	1454	1450	1454	1450	409
175°	1478	1487	1478	1487	1478	141
180°	1484	1484	1484	1484	1484	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1543.8	1545.0	1546.3	1543.4	1543.4	1540.9	1535.5	1531.5	1519.8	1518.2	1518.2
5°	1650.6	1649.5	1651.6	1645.0	1635.7	1633.6	1623.8	1610.9	1597.5	1582.6	1579.4
7.5°	1756.8	1755.2	1751.1	1750.0	1742.8	1727.3	1711.5	1694.8	1672.4	1650.7	1639.8
10°	1810.4	1827.5	1817.1	1799.1	1802.7	1778.5	1765.5	1743.4	1724.8	1692.3	1685.2
12.5°	1863.2	1869.9	1866.6	1856.3	1851.7	1834.9	1817.6	1798.3	1764.0	1734.8	1709.5
15°	1863.0	1872.8	1875.3	1872.3	1874.8	1873.8	1864.5	1848.6	1818.7	1786.7	1758.9
17.5°	1725.5	1732.2	1749.2	1760.6	1775.0	1805.5	1820.6	1826.4	1822.0	1803.8	1784.2
20°	1571.2	1559.8	1607.3	1631.5	1652.1	1703.6	1748.0	1765.0	1792.3	1791.8	1786.7
22.5°	1352.6	1355.3	1400.3	1429.1	1489.2	1540.8	1591.3	1655.4	1708.2	1743.1	1763.6
25°	993.9	1013.5	1058.3	1097.5	1164.5	1260.4	1347.5	1448.6	1543.9	1619.1	1690.8
27.5°	746.4	747.9	783.5	819.6	859.4	938.0	1047.6	1168.3	1304.2	1416.4	1545.5
30°	639.2	636.1	651.1	673.3	707.2	768.1	850.5	969.2	1104.7	1273.7	1424.3
32.5°	563.3	563.5	574.8	591.2	619.5	660.5	716.9	813.2	941.4	1107.6	1284.0
35°	489.7	489.2	497.5	509.3	521.2	547.4	586.1	636.6	724.8	879.9	1060.4
37.5°	437.0	439.2	443.2	450.6	463.7	478.4	501.6	535.5	598.2	690.0	841.7
40°	407.3	408.3	413.9	420.1	427.9	439.2	458.3	485.5	531.5	604.7	715.5
42.5°	380.0	381.0	385.1	390.8	396.9	408.3	424.0	447.7	484.8	542.0	633.4
45°	340.2	340.2	343.9	346.4	353.1	363.5	376.3	395.9	421.7	463.9	524.7
47.5°	302.9	303.0	305.4	309.8	314.1	322.0	334.8	350.7	369.5	402.2	454.1
50°	281.4	282.0	283.5	287.1	289.7	296.9	306.7	320.6	340.2	365.5	408.8
52.5°	264.2	263.8	265.8	267.3	269.1	274.3	281.6	293.9	311.3	333.4	369.2
55°	236.1	234.0	237.1	239.7	241.3	243.3	247.4	255.2	270.1	288.7	315.5
57.5°	201.1	200.3	202.4	204.8	209.6	215.2	218.6	223.6	231.4	244.7	271.2
60°	172.2	172.2	176.8	178.3	184.0	191.3	198.4	202.6	210.4	219.0	238.6
62.5°	146.6	147.0	149.2	150.8	153.9	162.8	172.9	182.0	189.2	197.6	210.7
65°	122.7	123.7	123.7	124.7	126.8	128.9	133.0	140.2	153.1	164.9	174.7
67.5°	104.1	104.4	104.7	105.7	106.3	108.6	110.2	113.4	116.4	127.6	139.8
70°	91.8	93.3	92.8	93.8	94.3	95.3	97.5	99.0	103.6	106.2	113.4
72.5°	80.2	81.3	81.2	81.9	83.2	83.4	85.0	86.6	89.6	91.8	95.6
75°	64.9	64.4	64.9	65.9	66.4	67.1	67.1	69.1	70.6	72.7	75.2
77.5°	50.1	50.6	50.5	50.6	50.7	51.6	51.5	52.5	54.0	55.0	56.2
80°	40.2	40.7	40.2	40.7	41.2	41.7	41.2	41.7	43.3	44.3	44.3
82.5°	31.1	31.2	31.5	31.6	31.7	31.8	32.6	32.7	33.8	33.6	34.0
85°	18.6	18.1	18.1	18.1	18.6	19.1	18.6	18.6	19.1	19.1	19.1
87.5°	12.4	12.7	12.6	12.5	12.4	12.2	12.0	12.2	11.5	11.7	10.9
90°	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8	22.6	21.5	19.6
92.5°	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2	25.5	24.9	23.9
95°	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2	43.0	41.9	40.2
97.5°	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0	57.0	56.0	52.2
100°	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0	63.1	61.2	57.2
102.5°	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9	65.4	62.9	96.8
105°	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7	68.1	65.4	130.6
107.5°	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3	89.0	91.7	169.8
110°	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2	164.0	187.8	256.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8	386.9	473.8	490.9
115°	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4	551.9	662.4	656.4
117.5°	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2	706.9	733.7	729.5
120°	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6	789.7	786.9	782.6
122.5°	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0	839.3	837.6	832.9
125°	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5	908.8	907.2	902.6
127.5°	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7	972.3	969.9	966.4
130°	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4	1012.8	1010.2	1007.5
132.5°	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0	1052.8	1050.6	1047.9
135°	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6	1109.2	1106.8	1104.7
137.5°	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1	1161.7	1159.4	1157.0
140°	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1	1195.9	1193.8	1191.1
142.5°	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4	1227.5	1225.6	1222.5
145°	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3	1271.6	1270.0	1266.0
147.5°	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5	1310.3	1309.1	1305.0
150°	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1	1333.7	1332.2	1328.5
152.5°	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6	1355.1	1353.7	1350.1
155°	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5	1384.1	1382.7	1379.9
157.5°	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0	1408.4	1406.7	1404.7
160°	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2	1422.8	1421.4	1420.0
162.5°	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4	1435.8	1434.2	1433.0
165°	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4	1449.7
167.5°	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2	1465.5	1463.9	1463.2
170°	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1	1472.4	1470.8	1470.3
172.5°	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3	1477.5	1475.9	1475.4
175°	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8	1483.2	1481.5	1481.0
177.5°	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4	1484.1	1482.8	1482.6
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1519.0	1515.7	1512.9	1505.4	1501.8	1493.5	1492.3	1491.9	1481.1	1470.8	1467.9
5°	1571.2	1563.0	1550.5	1536.1	1521.2	1505.7	1495.4	1487.2	1466.5	1446.9	1435.6
7.5°	1623.8	1606.1	1584.7	1557.4	1534.6	1509.0	1490.1	1473.1	1443.8	1415.7	1396.8
10°	1662.9	1634.1	1605.8	1568.1	1538.7	1509.8	1483.1	1459.9	1426.8	1389.8	1363.4
12.5°	1687.3	1655.6	1616.5	1579.6	1541.7	1504.9	1469.1	1439.3	1400.5	1362.1	1330.9
15°	1720.2	1686.2	1638.7	1586.2	1537.2	1489.2	1448.0	1410.9	1360.4	1314.5	1276.4
17.5°	1747.1	1700.3	1649.3	1588.5	1531.9	1470.9	1417.7	1370.4	1314.1	1258.8	1213.9
20°	1755.8	1709.4	1650.6	1589.7	1522.8	1451.1	1393.9	1342.3	1282.0	1221.7	1170.1
22.5°	1750.4	1714.3	1648.9	1576.2	1507.5	1432.5	1367.9	1308.1	1241.2	1179.6	1119.8
25°	1714.0	1701.6	1639.8	1560.3	1482.1	1394.9	1320.2	1254.7	1178.4	1112.5	1047.4
27.5°	1629.1	1655.9	1617.5	1533.0	1445.8	1352.4	1268.4	1193.9	1114.7	1040.5	975.7
30°	1547.5	1608.8	1592.4	1514.0	1416.5	1324.8	1230.5	1152.7	1068.1	991.8	927.9
32.5°	1435.7	1537.1	1553.2	1487.6	1386.8	1286.1	1187.2	1109.7	1021.5	941.1	878.8
35°	1257.8	1409.4	1478.9	1437.1	1336.2	1227.4	1125.3	1035.1	946.4	867.1	805.2
37.5°	1045.5	1251.9	1367.9	1370.9	1278.1	1165.0	1053.9	964.3	873.5	795.6	728.7
40°	907.8	1131.5	1282.5	1316.1	1237.7	1115.5	1003.1	911.9	823.2	746.9	670.1
42.5°	784.1	1006.9	1192.7	1250.9	1188.6	1067.2	954.5	859.1	773.0	700.7	622.3
45°	634.1	828.9	1033.6	1137.7	1103.2	990.8	871.7	780.9	700.0	637.6	562.4
47.5°	534.8	672.2	870.2	1011.1	1010.5	907.9	790.7	703.9	628.8	570.4	509.4
50°	478.4	597.9	765.5	925.3	938.7	852.6	741.2	655.2	585.1	523.7	474.7
52.5°	427.7	526.2	676.8	830.0	868.2	793.7	685.6	606.1	538.1	481.7	439.7
55°	361.3	437.7	552.1	695.4	753.2	700.5	604.7	530.5	475.2	427.9	391.7
57.5°	305.7	362.9	454.7	570.2	637.3	604.3	525.1	464.8	417.7	374.8	346.3
60°	270.6	317.5	395.4	491.8	566.0	542.8	475.2	419.1	378.9	341.7	315.0
62.5°	237.6	277.9	344.7	422.9	491.0	481.4	426.2	379.1	343.9	310.0	287.3
65°	191.3	220.7	272.7	334.1	388.7	393.3	353.7	321.6	290.2	263.4	243.3
67.5°	152.3	171.5	208.1	259.8	300.7	315.4	291.1	266.7	241.8	221.1	203.6
70°	128.4	143.8	170.7	212.4	250.0	265.5	251.6	232.5	210.9	193.8	178.8
72.5°	104.0	119.1	138.9	169.5	201.8	218.4	213.6	200.0	182.4	168.2	154.1
75°	78.4	83.0	96.4	117.0	142.3	156.7	160.4	153.1	139.2	128.4	120.1
77.5°	58.0	60.7	67.2	78.0	94.4	107.3	112.6	111.8	102.2	95.8	88.2
80°	46.4	48.0	51.0	55.6	68.1	80.9	84.5	84.5	77.9	75.2	67.6
82.5°	35.2	36.4	38.3	40.8	46.6	57.9	61.9	62.7	58.5	55.0	49.0
85°	20.1	19.6	20.6	22.1	23.2	26.3	32.5	33.5	32.5	28.4	26.8
87.5°	10.5	10.6	10.2	9.3	9.2	9.1	10.6	12.2	11.0	10.3	10.0
90°	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1	3.7	6.4	9.0
92.5°	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7	21.4	21.2	21.0
95°	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8	61.9	54.0	46.2
97.5°	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5	116.3	94.1	71.9
100°	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1	157.3	124.6	92.0
102.5°	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7	239.7	232.9	225.9
105°	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4	333.6	340.6	347.8
107.5°	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2	422.9	428.7	434.4
110°	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5	480.6	485.6	490.6



TEST NUMBER: P331699-840

CATALOG NUMBER: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6	535.0	539.4	543.8
115°	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3	621.4	625.4	629.4
117.5°	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8	699.3	703.9	708.4
120°	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4	755.1	758.6	762.2
122.5°	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6	803.3	807.1	810.9
125°	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8	875.9	879.0	882.1
127.5°	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2	942.6	946.0	949.5
130°	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2	985.0	988.9	992.7
132.5°	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1	1027.4	1030.7	1033.9
135°	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9	1083.8	1087.6	1091.5
137.5°	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4	1139.1	1141.8	1144.5
140°	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4	1175.3	1177.2	1179.1
142.5°	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3	1206.0	1207.7	1209.4
145°	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8	1252.5	1252.3	1252.1
147.5°	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2	1294.2	1293.3	1292.4
150°	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6	1320.9	1319.3	1317.6
152.5°	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7	1343.9	1342.0	1340.2
155°	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5	1377.4	1375.2	1373.0
157.5°	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9	1404.1	1402.3	1400.5
160°	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1420.0	1418.5	1417.0
162.5°	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1	1433.7	1432.2	1430.8
165°	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6	1452.1	1450.7	1449.3
167.5°	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3	1465.9	1464.4	1463.0
170°	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0	1473.6	1472.2	1470.8
172.5°	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2	1478.7	1477.3	1475.9
175°	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8	1485.2	1483.5	1481.9
177.5°	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9	1486.6	1485.2	1483.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331699-840

CATALOG NUMBER: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1462.6	1459.7	1454.3	1446.0	1441.1	1432.4	1426.6	1430.0	1430.8	1430.0	1429.2
5°	1423.3	1412.4	1397.5	1383.0	1369.7	1355.2	1347.0	1343.3	1336.2	1332.0	1330.0
7.5°	1375.7	1357.1	1336.0	1310.8	1289.4	1267.1	1255.7	1249.9	1235.2	1227.2	1220.1
10°	1340.3	1310.9	1289.8	1256.8	1236.7	1207.3	1187.2	1187.7	1167.6	1156.2	1148.0
12.5°	1301.1	1268.8	1233.7	1204.0	1176.0	1152.5	1128.2	1118.4	1097.0	1086.1	1063.9
15°	1236.2	1198.5	1161.4	1121.2	1092.9	1056.2	1021.2	978.4	943.8	913.9	905.7
17.5°	1165.2	1118.6	1081.4	1034.2	985.6	924.0	883.4	858.6	837.8	822.0	810.2
20°	1116.5	1069.1	1029.5	958.3	892.8	851.1	821.2	802.1	780.4	763.5	754.2
22.5°	1065.4	1015.9	961.8	882.4	831.4	797.9	771.2	749.3	734.7	721.3	713.0
25°	992.8	938.7	849.5	794.9	753.7	718.6	700.0	686.6	671.2	653.1	644.9
27.5°	916.1	830.0	766.0	725.4	686.0	663.2	646.5	626.5	612.7	604.6	596.0
30°	858.8	772.7	722.8	678.4	650.6	625.3	605.7	594.4	581.0	567.0	561.4
32.5°	794.9	726.1	678.2	641.3	613.0	591.5	576.0	557.6	548.0	539.4	527.6
35°	715.5	663.5	619.7	589.8	562.9	545.4	527.4	516.5	499.0	491.8	487.2
37.5°	648.2	603.1	570.5	538.9	517.7	498.3	487.3	470.0	462.4	452.4	442.6
40°	610.4	566.0	534.5	508.8	485.0	470.6	456.8	442.8	431.4	426.9	415.0
42.5°	571.6	535.5	504.0	475.7	459.9	444.6	427.1	416.9	405.1	397.6	390.2
45°	518.1	486.1	459.3	436.1	418.6	402.6	391.2	374.3	367.6	352.5	346.4
47.5°	471.1	441.3	415.8	393.7	376.6	366.2	349.6	336.3	325.6	316.4	308.5
50°	437.7	412.9	388.2	368.6	353.1	338.2	321.1	314.5	297.9	293.3	288.7
52.5°	407.2	383.6	360.9	341.7	326.3	311.7	296.8	288.0	276.9	272.3	268.9
55°	364.5	341.7	320.1	303.1	287.6	272.7	263.4	252.6	247.4	243.8	239.7
57.5°	321.5	301.1	284.6	267.3	251.8	239.9	229.1	222.7	217.3	212.6	207.6
60°	294.4	274.8	259.8	243.8	227.8	218.0	209.8	202.1	195.9	188.6	186.6
62.5°	265.5	248.3	234.7	219.0	205.2	196.2	188.3	181.1	173.6	163.1	160.2
65°	225.8	212.4	197.9	185.1	172.7	163.9	152.6	144.3	141.3	140.2	139.7
67.5°	190.0	177.2	164.8	151.7	140.4	132.3	126.5	125.2	123.1	122.5	121.1
70°	166.0	154.1	141.8	129.4	118.6	117.0	114.9	112.9	110.3	109.3	108.3
72.5°	144.5	132.3	119.9	110.0	105.3	103.4	101.4	99.3	97.6	96.5	95.8
75°	110.8	99.5	91.3	87.7	85.0	83.5	80.4	78.9	77.9	76.2	75.7
77.5°	79.8	73.4	69.6	67.4	64.6	63.0	61.2	59.7	58.6	58.3	57.5
80°	60.8	57.8	55.1	52.1	51.0	49.0	48.5	47.0	47.5	45.8	45.8
82.5°	47.3	43.3	41.1	39.7	38.7	37.1	36.5	35.7	35.9	34.7	34.7
85°	24.2	23.2	22.1	21.1	21.1	19.6	20.1	19.6	19.6	18.6	18.1
87.5°	10.2	10.2	9.8	10.1	10.5	10.5	10.7	10.5	10.8	11.0	10.8
90°	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8	25.0	26.3	27.1
92.5°	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2	26.8	27.4	27.9
95°	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2	45.4	46.7	47.2
97.5°	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0	58.9	59.9	60.5
100°	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0	67.0	68.9	70.0
102.5°	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9	70.4	72.8	74.4
105°	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7	73.3	75.9	77.8
107.5°	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3	83.6	81.0	80.2
110°	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2	116.3	92.4	81.0



TEST NUMBER: P331699-840

CATALOG NUMBER: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8	212.8	125.7	82.6
115°	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4	331.0	220.6	156.7
117.5°	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2	653.5	626.8	585.2
120°	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6	795.5	798.4	783.7
122.5°	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0	842.7	844.4	842.1
125°	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5	912.1	913.8	915.0
127.5°	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7	977.1	979.6	980.9
130°	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4	1018.0	1020.7	1021.9
132.5°	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0	1057.3	1059.6	1060.6
135°	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6	1114.0	1116.3	1117.3
137.5°	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1	1166.4	1168.7	1169.5
140°	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1	1200.2	1202.3	1202.9
142.5°	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4	1231.4	1233.3	1233.8
145°	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3	1275.0	1276.7	1276.9
147.5°	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5	1312.8	1314.0	1314.1
150°	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1	1336.6	1338.0	1338.1
152.5°	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6	1358.1	1359.5	1359.4
155°	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5	1387.0	1388.5	1388.2
157.5°	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0	1411.6	1413.2	1413.1
160°	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2	1425.6	1427.0	1426.9
162.5°	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4	1439.1	1440.8	1440.5
165°	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0
167.5°	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2	1468.8	1470.6	1470.3
170°	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1	1475.7	1477.4	1477.1
172.5°	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3	1480.9	1482.6	1482.4
175°	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8	1486.5	1488.1	1487.8
177.5°	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4	1486.7	1488.1	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331699-840

CATALOG NUMBER: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1424.6	1425.4	1424.2	1425.0	1424.2	1425.4	1424.6	1429.2	1430.0	1430.8	1430.0
5°	1327.4	1321.2	1320.2	1318.6	1320.2	1321.2	1327.4	1330.0	1332.0	1336.2	1343.3
7.5°	1211.3	1210.3	1207.8	1204.2	1207.8	1210.3	1211.3	1220.1	1227.2	1235.2	1249.9
10°	1136.6	1134.1	1133.6	1129.9	1133.6	1134.1	1136.6	1148.0	1156.2	1167.6	1187.7
12.5°	1049.2	1032.6	1030.9	1021.9	1030.9	1032.6	1049.2	1063.9	1086.1	1097.0	1118.4
15°	893.3	890.3	879.9	873.2	879.9	890.3	893.3	905.7	913.9	943.8	978.4
17.5°	804.3	794.2	790.9	789.5	790.9	794.2	804.3	810.2	822.0	837.8	858.6
20°	746.9	737.7	736.1	735.1	736.1	737.7	746.9	754.2	763.5	780.4	802.1
22.5°	707.3	697.6	693.7	690.5	693.7	697.6	707.3	713.0	721.3	734.7	749.3
25°	639.7	636.1	634.1	633.0	634.1	636.1	639.7	644.9	653.1	671.2	686.6
27.5°	586.8	578.9	577.3	574.7	577.3	578.9	586.8	596.0	604.6	612.7	626.5
30°	556.7	554.1	550.6	547.4	550.6	554.1	556.7	561.4	567.0	581.0	594.4
32.5°	521.3	519.1	515.9	514.4	515.9	519.1	521.3	527.6	539.4	548.0	557.6
35°	482.0	474.7	471.7	467.1	471.7	474.7	482.0	487.2	491.8	499.0	516.5
37.5°	440.4	436.7	432.3	433.8	432.3	436.7	440.4	442.6	452.4	462.4	470.0
40°	408.3	405.7	404.7	404.1	404.7	405.7	408.3	415.0	426.9	431.4	442.8
42.5°	382.7	375.6	372.9	372.8	372.9	375.6	382.7	390.2	397.6	405.1	416.9
45°	343.9	337.1	332.4	333.1	332.4	337.1	343.9	346.4	352.5	367.6	374.3
47.5°	304.1	303.9	300.9	301.8	300.9	303.9	304.1	308.5	316.4	325.6	336.3
50°	285.1	282.0	279.9	280.4	279.9	282.0	285.1	288.7	293.3	297.9	314.5
52.5°	266.9	264.3	262.6	264.8	262.6	264.3	266.9	268.9	272.3	276.9	288.0
55°	237.1	234.0	233.5	233.0	233.5	234.0	237.1	239.7	243.8	247.4	252.6
57.5°	203.8	201.8	198.6	197.3	198.6	201.8	203.8	207.6	212.6	217.3	222.7
60°	179.9	175.8	170.7	170.1	170.7	175.8	179.9	186.6	188.6	195.9	202.1
62.5°	158.0	157.2	156.2	156.1	156.2	157.2	158.0	160.2	163.1	173.6	181.1
65°	138.7	138.1	138.7	139.2	138.7	138.1	138.7	139.7	140.2	141.3	144.3
67.5°	120.9	119.9	119.0	119.4	119.0	119.9	120.9	121.1	122.5	123.1	125.2
70°	107.2	106.7	106.2	106.2	106.2	106.7	107.2	108.3	109.3	110.3	112.9
72.5°	94.0	93.9	93.4	93.0	93.4	93.9	94.0	95.8	96.5	97.6	99.3
75°	75.2	74.2	74.2	74.2	74.2	74.2	75.2	75.7	76.2	77.9	78.9
77.5°	57.4	56.9	56.2	55.8	56.2	56.9	57.4	57.5	58.3	58.6	59.7
80°	45.3	44.8	44.3	44.3	44.3	44.8	45.3	45.8	45.8	47.5	47.0
82.5°	34.6	34.1	34.0	33.6	34.0	34.1	34.6	34.7	34.7	35.9	35.7
85°	18.6	19.1	18.6	19.6	18.6	19.1	18.6	18.1	18.6	19.6	19.6
87.5°	10.9	10.6	11.1	10.7	11.1	10.6	10.9	10.8	11.0	10.8	10.5
90°	27.6	28.1	28.5	29.0	28.5	28.1	27.6	27.1	26.3	25.0	23.8
92.5°	28.2	28.4	28.7	29.0	28.7	28.4	28.2	27.9	27.4	26.8	26.2
95°	46.9	46.7	46.4	46.2	46.4	46.7	46.9	47.2	46.7	45.4	44.2
97.5°	60.8	61.1	61.3	61.6	61.3	61.1	60.8	60.5	59.9	58.9	58.0
100°	70.5	71.0	71.5	71.9	71.5	71.0	70.5	70.0	68.9	67.0	65.0
102.5°	75.0	75.7	76.4	77.1	76.4	75.7	75.0	74.4	72.8	70.4	67.9
105°	78.8	79.7	80.6	81.6	80.6	79.7	78.8	77.8	75.9	73.3	70.7
107.5°	81.1	82.0	83.0	83.9	83.0	82.0	81.1	80.2	81.0	83.6	86.3
110°	81.9	82.9	83.8	84.8	83.8	82.9	81.9	81.0	92.4	116.3	140.2



TEST NUMBER: P331699-840

CATALOG NUMBER: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	83.4	84.1	84.9	85.6	84.9	84.1	83.4	82.6	125.7	212.8	299.8
115°	139.6	122.4	105.2	88.1	105.2	122.4	139.6	156.7	220.6	331.0	441.4
117.5°	528.8	472.3	415.9	359.4	415.9	472.3	528.8	585.2	626.8	653.5	680.2
120°	751.4	719.2	687.0	654.9	687.0	719.2	751.4	783.7	798.4	795.5	792.6
122.5°	836.0	829.7	823.4	817.2	823.4	829.7	836.0	842.1	844.4	842.7	841.0
125°	915.7	916.5	917.2	917.9	917.2	916.5	915.7	915.0	913.8	912.1	910.5
127.5°	981.0	981.2	981.3	981.4	981.3	981.2	981.0	980.9	979.6	977.1	974.7
130°	1021.7	1021.4	1021.2	1021.0	1021.2	1021.4	1021.7	1021.9	1020.7	1018.0	1015.4
132.5°	1060.3	1060.1	1059.9	1059.6	1059.9	1060.1	1060.3	1060.6	1059.6	1057.3	1055.0
135°	1116.8	1116.3	1115.9	1115.4	1115.9	1116.3	1116.8	1117.3	1116.3	1114.0	1111.6
137.5°	1168.7	1167.9	1167.1	1166.3	1167.1	1167.9	1168.7	1169.5	1168.7	1166.4	1164.1
140°	1201.6	1200.4	1199.2	1198.1	1199.2	1200.4	1201.6	1202.9	1202.3	1200.2	1198.1
142.5°	1232.5	1231.3	1230.2	1229.0	1230.2	1231.3	1232.5	1233.8	1233.3	1231.4	1229.4
145°	1275.8	1274.6	1273.3	1272.1	1273.3	1274.6	1275.8	1276.9	1276.7	1275.0	1273.3
147.5°	1313.1	1312.1	1311.1	1310.1	1311.1	1312.1	1313.1	1314.1	1314.0	1312.8	1311.5
150°	1336.9	1335.7	1334.5	1333.3	1334.5	1335.7	1336.9	1338.1	1338.0	1336.6	1335.1
152.5°	1357.8	1356.2	1354.6	1353.1	1354.6	1356.2	1357.8	1359.4	1359.5	1358.1	1356.6
155°	1386.2	1384.4	1382.5	1380.6	1382.5	1384.4	1386.2	1388.2	1388.5	1387.0	1385.5
157.5°	1411.3	1409.4	1407.5	1405.6	1407.5	1409.4	1411.3	1413.1	1413.2	1411.6	1410.0
160°	1425.3	1423.6	1422.0	1420.3	1422.0	1423.6	1425.3	1426.9	1427.0	1425.6	1424.2
162.5°	1438.5	1436.4	1434.3	1432.3	1434.3	1436.4	1438.5	1440.5	1440.8	1439.1	1437.4
165°	1455.3	1453.7	1452.0	1450.4	1452.0	1453.7	1455.3	1457.0	1457.0	1455.3	1453.7
167.5°	1468.1	1466.0	1463.9	1461.7	1463.9	1466.0	1468.1	1470.3	1470.6	1468.8	1467.2
170°	1475.0	1472.9	1470.8	1468.5	1470.8	1472.9	1475.0	1477.1	1477.4	1475.7	1474.1
172.5°	1480.2	1478.0	1475.9	1473.7	1475.9	1478.0	1480.2	1482.4	1482.6	1480.9	1479.3
175°	1485.4	1483.0	1480.7	1478.2	1480.7	1483.0	1485.4	1487.8	1488.1	1486.5	1484.8
177.5°	1486.2	1484.5	1482.8	1481.1	1482.8	1484.5	1486.2	1487.9	1488.1	1486.7	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



TEST NUMBER: P331699-840

CATALOG NUMBER: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1426.6	1432.4	1441.1	1446.0	1454.3	1459.7	1462.6	1467.9	1470.8	1481.1	1491.9
5°	1347.0	1355.2	1369.7	1383.0	1397.5	1412.4	1423.3	1435.6	1446.9	1466.5	1487.2
7.5°	1255.7	1267.1	1289.4	1310.8	1336.0	1357.1	1375.7	1396.8	1415.7	1443.8	1473.1
10°	1187.2	1207.3	1236.7	1256.8	1289.8	1310.9	1340.3	1363.4	1389.8	1426.8	1459.9
12.5°	1128.2	1152.5	1176.0	1204.0	1233.7	1268.8	1301.1	1330.9	1362.1	1400.5	1439.3
15°	1021.2	1056.2	1092.9	1121.2	1161.4	1198.5	1236.2	1276.4	1314.5	1360.4	1410.9
17.5°	883.4	924.0	985.6	1034.2	1081.4	1118.6	1165.2	1213.9	1258.8	1314.1	1370.4
20°	821.2	851.1	892.8	958.3	1029.5	1069.1	1116.5	1170.1	1221.7	1282.0	1342.3
22.5°	771.2	797.9	831.4	882.4	961.8	1015.9	1065.4	1119.8	1179.6	1241.2	1308.1
25°	700.0	718.6	753.7	794.9	849.5	938.7	992.8	1047.4	1112.5	1178.4	1254.7
27.5°	646.5	663.2	686.0	725.4	766.0	830.0	916.1	975.7	1040.5	1114.7	1193.9
30°	605.7	625.3	650.6	678.4	722.8	772.7	858.8	927.9	991.8	1068.1	1152.7
32.5°	576.0	591.5	613.0	641.3	678.2	726.1	794.9	878.8	941.1	1021.5	1109.7
35°	527.4	545.4	562.9	589.8	619.7	663.5	715.5	805.2	867.1	946.4	1035.1
37.5°	487.3	498.3	517.7	538.9	570.5	603.1	648.2	728.7	795.6	873.5	964.3
40°	456.8	470.6	485.0	508.8	534.5	566.0	610.4	670.1	746.9	823.2	911.9
42.5°	427.1	444.6	459.9	475.7	504.0	535.5	571.6	622.3	700.7	773.0	859.1
45°	391.2	402.6	418.6	436.1	459.3	486.1	518.1	562.4	637.6	700.0	780.9
47.5°	349.6	366.2	376.6	393.7	415.8	441.3	471.1	509.4	570.4	628.8	703.9
50°	321.1	338.2	353.1	368.6	388.2	412.9	437.7	474.7	523.7	585.1	655.2
52.5°	296.8	311.7	326.3	341.7	360.9	383.6	407.2	439.7	481.7	538.1	606.1
55°	263.4	272.7	287.6	303.1	320.1	341.7	364.5	391.7	427.9	475.2	530.5
57.5°	229.1	239.9	251.8	267.3	284.6	301.1	321.5	346.3	374.8	417.7	464.8
60°	209.8	218.0	227.8	243.8	259.8	274.8	294.4	315.0	341.7	378.9	419.1
62.5°	188.3	196.2	205.2	219.0	234.7	248.3	265.5	287.3	310.0	343.9	379.1
65°	152.6	163.9	172.7	185.1	197.9	212.4	225.8	243.3	263.4	290.2	321.6
67.5°	126.5	132.3	140.4	151.7	164.8	177.2	190.0	203.6	221.1	241.8	266.7
70°	114.9	117.0	118.6	129.4	141.8	154.1	166.0	178.8	193.8	210.9	232.5
72.5°	101.4	103.4	105.3	110.0	119.9	132.3	144.5	154.1	168.2	182.4	200.0
75°	80.4	83.5	85.0	87.7	91.3	99.5	110.8	120.1	128.4	139.2	153.1
77.5°	61.2	63.0	64.6	67.4	69.6	73.4	79.8	88.2	95.8	102.2	111.8
80°	48.5	49.0	51.0	52.1	55.1	57.8	60.8	67.6	75.2	77.9	84.5
82.5°	36.5	37.1	38.7	39.7	41.1	43.3	47.3	49.0	55.0	58.5	62.7
85°	20.1	19.6	21.1	21.1	22.1	23.2	24.2	26.8	28.4	32.5	33.5
87.5°	10.7	10.5	10.5	10.1	9.8	10.2	10.2	10.0	10.3	11.0	12.2
90°	22.6	21.5	19.6	17.7	15.8	13.8	11.6	9.0	6.4	3.7	1.1
92.5°	25.5	24.9	23.9	23.0	22.0	21.1	20.7	21.0	21.2	21.4	21.7
95°	43.0	41.9	40.2	38.6	36.9	35.1	38.3	46.2	54.0	61.9	69.8
97.5°	57.0	56.0	52.2	48.3	44.4	40.6	49.8	71.9	94.1	116.3	138.5
100°	63.1	61.2	57.2	53.1	49.0	44.9	59.3	92.0	124.6	157.3	190.1
102.5°	65.4	62.9	96.8	130.8	164.7	198.6	219.0	225.9	232.9	239.7	246.7
105°	68.1	65.4	130.6	195.7	260.8	326.0	355.0	347.8	340.6	333.6	326.4
107.5°	89.0	91.7	169.8	247.9	326.0	404.1	440.3	434.4	428.7	422.9	417.2
110°	164.0	187.8	256.8	325.8	394.7	463.6	495.6	490.6	485.6	480.6	475.5



TEST NUMBER: P331699-840

CATALOG NUMBER: SA2XXRDIP-C675D1080U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	386.9	473.8	490.9	508.0	524.9	542.0	548.3	543.8	539.4	535.0	530.6
115°	551.9	662.4	656.4	650.5	644.5	638.5	633.5	629.4	625.4	621.4	617.3
117.5°	706.9	733.7	729.5	725.5	721.3	717.2	713.0	708.4	703.9	699.3	694.8
120°	789.7	786.9	782.6	778.3	774.1	769.7	765.8	762.2	758.6	755.1	751.4
122.5°	839.3	837.6	832.9	828.2	823.5	818.9	814.7	810.9	807.1	803.3	799.6
125°	908.8	907.2	902.6	898.1	893.5	889.0	885.1	882.1	879.0	875.9	872.8
127.5°	972.3	969.9	966.4	963.0	959.7	956.2	952.9	949.5	946.0	942.6	939.2
130°	1012.8	1010.2	1007.5	1004.9	1002.3	999.7	996.4	992.7	988.9	985.0	981.2
132.5°	1052.8	1050.6	1047.9	1045.3	1042.7	1040.1	1037.1	1033.9	1030.7	1027.4	1024.1
135°	1109.2	1106.8	1104.7	1102.5	1100.3	1098.2	1095.2	1091.5	1087.6	1083.8	1079.9
137.5°	1161.7	1159.4	1157.0	1154.6	1152.2	1149.6	1147.1	1144.5	1141.8	1139.1	1136.4
140°	1195.9	1193.8	1191.1	1188.5	1185.9	1183.3	1181.0	1179.1	1177.2	1175.3	1173.4
142.5°	1227.5	1225.6	1222.5	1219.5	1216.5	1213.6	1211.1	1209.4	1207.7	1206.0	1204.3
145°	1271.6	1270.0	1266.0	1261.8	1257.8	1253.7	1251.8	1252.1	1252.3	1252.5	1252.8
147.5°	1310.3	1309.1	1305.0	1301.0	1297.1	1293.0	1291.5	1292.4	1293.3	1294.2	1295.2
150°	1333.7	1332.2	1328.5	1324.6	1320.8	1317.0	1316.0	1317.6	1319.3	1320.9	1322.6
152.5°	1355.1	1353.7	1350.1	1346.5	1342.8	1339.2	1338.4	1340.2	1342.0	1343.9	1345.7
155°	1384.1	1382.7	1379.9	1377.0	1374.1	1371.3	1370.9	1373.0	1375.2	1377.4	1379.5
157.5°	1408.4	1406.7	1404.7	1402.7	1400.8	1398.8	1398.7	1400.5	1402.3	1404.1	1405.9
160°	1422.8	1421.4	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4
162.5°	1435.8	1434.2	1433.0	1431.8	1430.5	1429.3	1429.4	1430.8	1432.2	1433.7	1435.1
165°	1452.0	1450.4	1449.7	1449.0	1448.1	1447.4	1447.8	1449.3	1450.7	1452.1	1453.6
167.5°	1465.5	1463.9	1463.2	1462.5	1461.9	1461.2	1461.6	1463.0	1464.4	1465.9	1467.3
170°	1472.4	1470.8	1470.3	1469.8	1469.4	1468.8	1469.4	1470.8	1472.2	1473.6	1475.0
172.5°	1477.5	1475.9	1475.4	1474.9	1474.5	1474.0	1474.5	1475.9	1477.3	1478.7	1480.2
175°	1483.2	1481.5	1481.0	1480.6	1480.1	1479.6	1480.2	1481.9	1483.5	1485.2	1486.8
177.5°	1484.1	1482.8	1482.6	1482.4	1482.2	1482.0	1482.6	1483.9	1485.2	1486.6	1487.9
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1492.3	1493.5	1501.8	1505.4	1512.9	1515.7	1519.0	1518.2	1518.2	1519.8	1531.5
5°	1495.4	1505.7	1521.2	1536.1	1550.5	1563.0	1571.2	1579.4	1582.6	1597.5	1610.9
7.5°	1490.1	1509.0	1534.6	1557.4	1584.7	1606.1	1623.8	1639.8	1650.7	1672.4	1694.8
10°	1483.1	1509.8	1538.7	1568.1	1605.8	1634.1	1662.9	1685.2	1692.3	1724.8	1743.4
12.5°	1469.1	1504.9	1541.7	1579.6	1616.5	1655.6	1687.3	1709.5	1734.8	1764.0	1798.3
15°	1448.0	1489.2	1537.2	1586.2	1638.7	1686.2	1720.2	1758.9	1786.7	1818.7	1848.6
17.5°	1417.7	1470.9	1531.9	1588.5	1649.3	1700.3	1747.1	1784.2	1803.8	1822.0	1826.4
20°	1393.9	1451.1	1522.8	1589.7	1650.6	1709.4	1755.8	1786.7	1791.8	1792.3	1765.0
22.5°	1367.9	1432.5	1507.5	1576.2	1648.9	1714.3	1750.4	1763.6	1743.1	1708.2	1655.4
25°	1320.2	1394.9	1482.1	1560.3	1639.8	1701.6	1714.0	1690.8	1619.1	1543.9	1448.6
27.5°	1268.4	1352.4	1445.8	1533.0	1617.5	1655.9	1629.1	1545.5	1416.4	1304.2	1168.3
30°	1230.5	1324.8	1416.5	1514.0	1592.4	1608.8	1547.5	1424.3	1273.7	1104.7	969.2
32.5°	1187.2	1286.1	1386.8	1487.6	1553.2	1537.1	1435.7	1284.0	1107.6	941.4	813.2
35°	1125.3	1227.4	1336.2	1437.1	1478.9	1409.4	1257.8	1060.4	879.9	724.8	636.6
37.5°	1053.9	1165.0	1278.1	1370.9	1367.9	1251.9	1045.5	841.7	690.0	598.2	535.5
40°	1003.1	1115.5	1237.7	1316.1	1282.5	1131.5	907.8	715.5	604.7	531.5	485.5
42.5°	954.5	1067.2	1188.6	1250.9	1192.7	1006.9	784.1	633.4	542.0	484.8	447.7
45°	871.7	990.8	1103.2	1137.7	1033.6	828.9	634.1	524.7	463.9	421.7	395.9
47.5°	790.7	907.9	1010.5	1011.1	870.2	672.2	534.8	454.1	402.2	369.5	350.7
50°	741.2	852.6	938.7	925.3	765.5	597.9	478.4	408.8	365.5	340.2	320.6
52.5°	685.6	793.7	868.2	830.0	676.8	526.2	427.7	369.2	333.4	311.3	293.9
55°	604.7	700.5	753.2	695.4	552.1	437.7	361.3	315.5	288.7	270.1	255.2
57.5°	525.1	604.3	637.3	570.2	454.7	362.9	305.7	271.2	244.7	231.4	223.6
60°	475.2	542.8	566.0	491.8	395.4	317.5	270.6	238.6	219.0	210.4	202.6
62.5°	426.2	481.4	491.0	422.9	344.7	277.9	237.6	210.7	197.6	189.2	182.0
65°	353.7	393.3	388.7	334.1	272.7	220.7	191.3	174.7	164.9	153.1	140.2
67.5°	291.1	315.4	300.7	259.8	208.1	171.5	152.3	139.8	127.6	116.4	113.4
70°	251.6	265.5	250.0	212.4	170.7	143.8	128.4	113.4	106.2	103.6	99.0
72.5°	213.6	218.4	201.8	169.5	138.9	119.1	104.0	95.6	91.8	89.6	86.6
75°	160.4	156.7	142.3	117.0	96.4	83.0	78.4	75.2	72.7	70.6	69.1
77.5°	112.6	107.3	94.4	78.0	67.2	60.7	58.0	56.2	55.0	54.0	52.5
80°	84.5	80.9	68.1	55.6	51.0	48.0	46.4	44.3	44.3	43.3	41.7
82.5°	61.9	57.9	46.6	40.8	38.3	36.4	35.2	34.0	33.6	33.8	32.7
85°	32.5	26.3	23.2	22.1	20.6	19.6	20.1	19.1	19.1	19.1	18.6
87.5°	10.6	9.1	9.2	9.3	10.2	10.6	10.5	10.9	11.7	11.5	12.2
90°	3.7	6.4	9.0	11.6	13.8	15.8	17.7	19.6	21.5	22.6	23.8
92.5°	21.4	21.2	21.0	20.7	21.1	22.0	23.0	23.9	24.9	25.5	26.2
95°	61.9	54.0	46.2	38.3	35.1	36.9	38.6	40.2	41.9	43.0	44.2
97.5°	116.3	94.1	71.9	49.8	40.6	44.4	48.3	52.2	56.0	57.0	58.0
100°	157.3	124.6	92.0	59.3	44.9	49.0	53.1	57.2	61.2	63.1	65.0
102.5°	239.7	232.9	225.9	219.0	198.6	164.7	130.8	96.8	62.9	65.4	67.9
105°	333.6	340.6	347.8	355.0	326.0	260.8	195.7	130.6	65.4	68.1	70.7
107.5°	422.9	428.7	434.4	440.3	404.1	326.0	247.9	169.8	91.7	89.0	86.3
110°	480.6	485.6	490.6	495.6	463.6	394.7	325.8	256.8	187.8	164.0	140.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	535.0	539.4	543.8	548.3	542.0	524.9	508.0	490.9	473.8	386.9	299.8
115°	621.4	625.4	629.4	633.5	638.5	644.5	650.5	656.4	662.4	551.9	441.4
117.5°	699.3	703.9	708.4	713.0	717.2	721.3	725.5	729.5	733.7	706.9	680.2
120°	755.1	758.6	762.2	765.8	769.7	774.1	778.3	782.6	786.9	789.7	792.6
122.5°	803.3	807.1	810.9	814.7	818.9	823.5	828.2	832.9	837.6	839.3	841.0
125°	875.9	879.0	882.1	885.1	889.0	893.5	898.1	902.6	907.2	908.8	910.5
127.5°	942.6	946.0	949.5	952.9	956.2	959.7	963.0	966.4	969.9	972.3	974.7
130°	985.0	988.9	992.7	996.4	999.7	1002.3	1004.9	1007.5	1010.2	1012.8	1015.4
132.5°	1027.4	1030.7	1033.9	1037.1	1040.1	1042.7	1045.3	1047.9	1050.6	1052.8	1055.0
135°	1083.8	1087.6	1091.5	1095.2	1098.2	1100.3	1102.5	1104.7	1106.8	1109.2	1111.6
137.5°	1139.1	1141.8	1144.5	1147.1	1149.6	1152.2	1154.6	1157.0	1159.4	1161.7	1164.1
140°	1175.3	1177.2	1179.1	1181.0	1183.3	1185.9	1188.5	1191.1	1193.8	1195.9	1198.1
142.5°	1206.0	1207.7	1209.4	1211.1	1213.6	1216.5	1219.5	1222.5	1225.6	1227.5	1229.4
145°	1252.5	1252.3	1252.1	1251.8	1253.7	1257.8	1261.8	1266.0	1270.0	1271.6	1273.3
147.5°	1294.2	1293.3	1292.4	1291.5	1293.0	1297.1	1301.0	1305.0	1309.1	1310.3	1311.5
150°	1320.9	1319.3	1317.6	1316.0	1317.0	1320.8	1324.6	1328.5	1332.2	1333.7	1335.1
152.5°	1343.9	1342.0	1340.2	1338.4	1339.2	1342.8	1346.5	1350.1	1353.7	1355.1	1356.6
155°	1377.4	1375.2	1373.0	1370.9	1371.3	1374.1	1377.0	1379.9	1382.7	1384.1	1385.5
157.5°	1404.1	1402.3	1400.5	1398.7	1398.8	1400.8	1402.7	1404.7	1406.7	1408.4	1410.0
160°	1420.0	1418.5	1417.0	1415.6	1415.6	1417.0	1418.5	1420.0	1421.4	1422.8	1424.2
162.5°	1433.7	1432.2	1430.8	1429.4	1429.3	1430.5	1431.8	1433.0	1434.2	1435.8	1437.4
165°	1452.1	1450.7	1449.3	1447.8	1447.4	1448.1	1449.0	1449.7	1450.4	1452.0	1453.7
167.5°	1465.9	1464.4	1463.0	1461.6	1461.2	1461.9	1462.5	1463.2	1463.9	1465.5	1467.2
170°	1473.6	1472.2	1470.8	1469.4	1468.8	1469.4	1469.8	1470.3	1470.8	1472.4	1474.1
172.5°	1478.7	1477.3	1475.9	1474.5	1474.0	1474.5	1474.9	1475.4	1475.9	1477.5	1479.3
175°	1485.2	1483.5	1481.9	1480.2	1479.6	1480.1	1480.6	1481.0	1481.5	1483.2	1484.8
177.5°	1486.6	1485.2	1483.9	1482.6	1482.0	1482.2	1482.4	1482.6	1482.8	1484.1	1485.4
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6
2.5°	1535.5	1540.9	1543.4	1543.4	1546.3	1545.0	1543.8
5°	1623.8	1633.6	1635.7	1645.0	1651.6	1649.5	1650.6
7.5°	1711.5	1727.3	1742.8	1750.0	1751.1	1755.2	1756.8
10°	1765.5	1778.5	1802.7	1799.1	1817.1	1827.5	1810.4
12.5°	1817.6	1834.9	1851.7	1856.3	1866.6	1869.9	1863.2
15°	1864.5	1873.8	1874.8	1872.3	1875.3	1872.8	1863.0
17.5°	1820.6	1805.5	1775.0	1760.6	1749.2	1732.2	1725.5
20°	1748.0	1703.6	1652.1	1631.5	1607.3	1559.8	1571.2
22.5°	1591.3	1540.8	1489.2	1429.1	1400.3	1355.3	1352.6
25°	1347.5	1260.4	1164.5	1097.5	1058.3	1013.5	993.9
27.5°	1047.6	938.0	859.4	819.6	783.5	747.9	746.4
30°	850.5	768.1	707.2	673.3	651.1	636.1	639.2
32.5°	716.9	660.5	619.5	591.2	574.8	563.5	563.3
35°	586.1	547.4	521.2	509.3	497.5	489.2	489.7
37.5°	501.6	478.4	463.7	450.6	443.2	439.2	437.0
40°	458.3	439.2	427.9	420.1	413.9	408.3	407.3
42.5°	424.0	408.3	396.9	390.8	385.1	381.0	380.0
45°	376.3	363.5	353.1	346.4	343.9	340.2	340.2
47.5°	334.8	322.0	314.1	309.8	305.4	303.0	302.9
50°	306.7	296.9	289.7	287.1	283.5	282.0	281.4
52.5°	281.6	274.3	269.1	267.3	265.8	263.8	264.2
55°	247.4	243.3	241.3	239.7	237.1	234.0	236.1
57.5°	218.6	215.2	209.6	204.8	202.4	200.3	201.1
60°	198.4	191.3	184.0	178.3	176.8	172.2	172.2
62.5°	172.9	162.8	153.9	150.8	149.2	147.0	146.6
65°	133.0	128.9	126.8	124.7	123.7	123.7	122.7
67.5°	110.2	108.6	106.3	105.7	104.7	104.4	104.1
70°	97.5	95.3	94.3	93.8	92.8	93.3	91.8
72.5°	85.0	83.4	83.2	81.9	81.2	81.3	80.2
75°	67.1	67.1	66.4	65.9	64.9	64.4	64.9
77.5°	51.5	51.6	50.7	50.6	50.5	50.6	50.1
80°	41.2	41.7	41.2	40.7	40.2	40.7	40.2
82.5°	32.6	31.8	31.7	31.6	31.5	31.2	31.1
85°	18.6	19.1	18.6	18.1	18.1	18.1	18.6
87.5°	12.0	12.2	12.4	12.5	12.6	12.7	12.4
90°	25.0	26.3	27.1	27.6	28.1	28.5	29.0
92.5°	26.8	27.4	27.9	28.2	28.4	28.7	29.0
95°	45.4	46.7	47.2	46.9	46.7	46.4	46.2
97.5°	58.9	59.9	60.5	60.8	61.1	61.3	61.6
100°	67.0	68.9	70.0	70.5	71.0	71.5	71.9
102.5°	70.4	72.8	74.4	75.0	75.7	76.4	77.1
105°	73.3	75.9	77.8	78.8	79.7	80.6	81.6
107.5°	83.6	81.0	80.2	81.1	82.0	83.0	83.9
110°	116.3	92.4	81.0	81.9	82.9	83.8	84.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.8	125.7	82.6	83.4	84.1	84.9	85.6
115°	331.0	220.6	156.7	139.6	122.4	105.2	88.1
117.5°	653.5	626.8	585.2	528.8	472.3	415.9	359.4
120°	795.5	798.4	783.7	751.4	719.2	687.0	654.9
122.5°	842.7	844.4	842.1	836.0	829.7	823.4	817.2
125°	912.1	913.8	915.0	915.7	916.5	917.2	917.9
127.5°	977.1	979.6	980.9	981.0	981.2	981.3	981.4
130°	1018.0	1020.7	1021.9	1021.7	1021.4	1021.2	1021.0
132.5°	1057.3	1059.6	1060.6	1060.3	1060.1	1059.9	1059.6
135°	1114.0	1116.3	1117.3	1116.8	1116.3	1115.9	1115.4
137.5°	1166.4	1168.7	1169.5	1168.7	1167.9	1167.1	1166.3
140°	1200.2	1202.3	1202.9	1201.6	1200.4	1199.2	1198.1
142.5°	1231.4	1233.3	1233.8	1232.5	1231.3	1230.2	1229.0
145°	1275.0	1276.7	1276.9	1275.8	1274.6	1273.3	1272.1
147.5°	1312.8	1314.0	1314.1	1313.1	1312.1	1311.1	1310.1
150°	1336.6	1338.0	1338.1	1336.9	1335.7	1334.5	1333.3
152.5°	1358.1	1359.5	1359.4	1357.8	1356.2	1354.6	1353.1
155°	1387.0	1388.5	1388.2	1386.2	1384.4	1382.5	1380.6
157.5°	1411.6	1413.2	1413.1	1411.3	1409.4	1407.5	1405.6
160°	1425.6	1427.0	1426.9	1425.3	1423.6	1422.0	1420.3
162.5°	1439.1	1440.8	1440.5	1438.5	1436.4	1434.3	1432.3
165°	1455.3	1457.0	1457.0	1455.3	1453.7	1452.0	1450.4
167.5°	1468.8	1470.6	1470.3	1468.1	1466.0	1463.9	1461.7
170°	1475.7	1477.4	1477.1	1475.0	1472.9	1470.8	1468.5
172.5°	1480.9	1482.6	1482.4	1480.2	1478.0	1475.9	1473.7
175°	1486.5	1488.1	1487.8	1485.4	1483.0	1480.7	1478.2
177.5°	1486.7	1488.1	1487.9	1486.2	1484.5	1482.8	1481.1
180°	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6	1483.6

(END OF REPORT)